

Burnout in Higher Education: Challenging the Assumption of Dimensional Convergence

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Abstract

*This cross-sectional study examines burnout among academic staff in higher education, with particular attention to whether burnout dimensions converge as a unified syndrome. Guided by Maslach's theory of burnout, data were collected using the Maslach Burnout Inventory–Educators Survey (MBI–ES). One-sample *t* tests were conducted to compare burnout dimension scores with their respective scale midpoints. Emotional exhaustion was slightly above the midpoint, personal accomplishment significantly above it, and depersonalisation significantly below it. These findings indicate that the burnout dimensions did not co-occur uniformly among academic staff. Despite extensive literature reporting high occupational stress in academia, the results suggest relatively low levels of burnout and challenge the assumption that burnout necessarily manifests through the simultaneous presence of all three dimensions. The findings support a more differentiated conceptualisation of burnout and underscore the need for greater clarity in its measurement and interpretation in higher education contexts.*

Keywords: Higher education; academic staff; burnout; conceptualisation; Maslach

1. Introduction

Burnout consists of emotional exhaustion (feeling emotionally drained due to intense workplace demands), depersonalisation (experiences of detachment and negative or callous attitudes toward others in the workplace), and reduced personal accomplishment (feelings of inefficacy or diminished competence and achievement at work) (Maslach & Jackson, 1981). Burnout has significant consequences. A recent meta-analysis pointed to the consequences of burnout (Koutsimani et al., 2019), such as a significant association between burnout and depression ($r=0.520$, $SE=0.012$, 95% $CI=0.492, 0.547$) and burnout and anxiety ($r=0.460$, $SE=0.014$, 95% $CI=0.421, 0.497$). Salyers et al. (2017) also report statistically significant negative relationships between burnout and quality ($r=-0.26$, 95 % $CI [-0.29, -0.23]$) and safety ($r=-0.23$, 95 % $CI [-0.28, -0.17]$) in the workplace.

Maslach et al.'s (2001) theory of burnout aligns closely with the Job Demands–Resources (JD–R) model (Demerouti et al., 2001), which posits that job demands – such as workload, emotional demands, time pressure, and role conflict – need to be balanced with job resources, including social support, feedback, autonomy, skill variety, and career development opportunities. An imbalance in which demands outweigh resources may lead to burnout and reduced job satisfaction, whereas sufficient resources foster engagement, satisfaction, and productivity.

Stress arising from an imbalance between demands and resources among academic staff in higher education is widely reported. Approximately 20% of academics experience significant stress (Palafox Carvajal & Domínguez Guedea, 2021), while nearly two-thirds of university teachers report work-related stress at least half of the time (Blix et al., 1994). Consistent with the JD–R model, academic work is characterised by increasing demands related to teaching, research, publication, and administration, often combined with limited control due to insufficient resources, which contributes to burnout (Avargues & Borda, 2010). Similarly, Sabagh (2018, p. 131) reports that a meta-analytical review revealed the detrimental effects of adverse job demands (e.g., workload, task characteristics, value conflict) and a lack of resources (e.g., social support, rewards, control) on faculty burnout, alongside mixed effects of demographic background factors. Work overload is consistently identified as the primary source of stress in university settings (Gillespie et al., 2001), while research activities, rather than teaching tasks, have been shown to contribute more strongly to stress and burnout (Arquero & Donoso, 2013).

Research on burnout among university staff generally indicates that this phenomenon is prevalent in higher education. Lackritz (2004) found that approximately 20% of university professors reported high burnout, while more recent work by Amir (2020) suggests that up to 40% of professors experience elevated levels. A systematic review by Watt and Robertson (2011) reports similar findings. However, notable variation exists, with some studies reporting substantially lower prevalence rates; for example, Herranz-Bellido et al. (2006) found a prevalence of 1.8%, and Palmer et al. (2016) reported 2.6% in a sample of 554 university professors. With reference to Maslach et al.'s (2001) theory of burnout and its dimensions, some studies identify emotional exhaustion and depersonalisation as core components (Avargues et al., 2010). In contrast, other research emphasises reduced personal accomplishment as the primary manifestation among academics, with depersonalisation contributing least (Ardıç & Polateci, 2008; Marenco & Avila, 2016). Taken together, these divergent findings regarding prevalence rates and dominant dimensions suggest that further research is required to clarify the nature, extent, and manifestation of burnout among university staff. This study examines a single hypothesis: that academic staff exhibit no symptoms of burnout, with the alternative proposing high levels.

2. Method

A cross-sectional survey design was used, with data collected via an online questionnaire. The target population comprised all academic staff at the university (N=1 823), with institutional email addresses serving as the sampling frame, as the aim was to conduct a census.

Data were collected on six demographic variables, namely job type, job level, work arrangements, sex, age, and tenure, as well as using the Academic Job Demands Questionnaire (AJDQ) and the Maslach Burnout Inventory–Educators Survey (MBI–ES) (Van Horn & Schaufeli, 1998). The AJDQ comprised stressors identified in the JD–R model (Demerouti et al., 2001) and those associated with academic work (Palafox Carvajal & Domínguez Guedea, 2021). Items were measured on a five-point Likert scale, with 3 representing the midpoint.

The MBI–ES builds on the seminal work of Maslach et al. (1997) and Schaufeli et al. (1994) and assesses three dimensions of burnout: emotional exhaustion, depersonalisation, and personal accomplishment.

- Emotional exhaustion refers to feelings of being emotionally drained and overwhelmed by work demands, resulting in depletion and fatigue.
- Depersonalisation involves the development of negative or cynical attitudes towards students and others in the educational environment, leading to emotional detachment.
- Personal accomplishment reflects educators' perceptions of their effectiveness and successful achievement at work, including feelings of competence and positive impact.

MBI–ES items were measured on a seven-point ordinal scale, with 4 arbitrarily selected as the midpoint. Respondents were asked to indicate how often they experienced each situation, where 1=never, 2=very rarely (a few times a year or less), 3=sometimes (a few times a month or less), 4=regularly (several times a month), 5=often (once a week), 6=very often (several times a week), and 7=always (every day).

All demographic data were categorical or measured on ordinal scales and presented in narrative form to comply with space limitations, as their presentation in tables would have required excessive length. Reliability information (Cronbach's alpha) and some validity information (CFA) were calculated and are reported briefly.

The main analysis involved applying one-sample t tests to assess how far respondents' scores deviated from selected midpoint values. For stressor items, the midpoint was 3 (five-point scale), and for burnout items, 4 (seven-point scale). These values were treated as hypothesised population means against which sample means were compared. The resulting t values indicate whether the null hypothesis of equal means should be rejected. The significance level was set at $p<.05$; when the p-value fell below this threshold, the sample mean was considered significantly different from the hypothesised population mean (Field, 2018). In addition, Cohen's d was

calculated to assess practical significance, using Cohen's (1988) guidelines, where $d \approx 0.20$ represents a small effect, $d \approx 0.50$ a medium effect, and $d \geq 0.80$ a large effect.

Data are provided on both stressors, (AJDQ) and burnout, as well as on the correlations between these constructs, not primarily to test the research hypothesis but rather to ensure completeness and to stimulate further research.

Ethical clearance was obtained from the University of South Africa's College of Human Sciences_CREC (NHREC Registration # Rec-240816-052), Ref # 2327, and the Research Permission Sub-committee (RPSC) of the Senate Research, Innovation, Postgraduate Degrees and Commercialisation Committee (SRIPCC), Ref # 2024_RPC_049. All ethical research guidelines were followed, and no breaches were reported to the overseeing authorities or the authors of this report.

3. Results

In total, 265 questionnaires were completed. Relative to the permanent academic staff population of 1 823 (Unisa, 2023), this corresponds to a response rate of 14.5%, which aligns with expectations for surveys of this nature. The respondent group was largely female (69.3%), with male academics accounting for 29.9% of the sample. This distribution reflects the broader trend of female predominance within academia, where women constitute the majority of academic staff at many universities (Wheeler & Wiese, 2025). The largest age cohort comprised respondents aged 31–40 years (33.3%), followed by those aged 41–50 years (25.8%) and 51–60 years (23.1%). With respect to tenure, academics with 0–5 years of service formed the largest group (28.4%), followed by those with 11–15 years (23.1%) and 6–10 years (20.5%), while longer service categories were progressively less represented. In terms of academic rank, most respondents were lecturers (36.0%) or senior lecturers (34.8%), with smaller proportions at associate professor (11.4%) and professor level (10.2%). Regarding work arrangements, the largest proportion reported working mostly on campus (40.2%), followed by those in hybrid arrangements (23.5%), while fewer respondents worked mostly remotely (21.6%) or exclusively at or away from the office.

The AJDQ (21 items) demonstrated high reliability (Cronbach's $\alpha=.898$). The MBI-ES also showed acceptable reliability across its subscales: emotional exhaustion ($\alpha=.923$; 8 items), personal accomplishment ($\alpha=.764$; 7 items), and depersonalisation ($\alpha=.756$; 7 items). Overall, all scales used demonstrated acceptable reliability.

Factorial validity evidence was drawn from a university-wide sample ($N=680$), as the academic subsample alone was too small for stable estimation. Absolute fit indices met recommended thresholds (SRMR=.079; RMSEA=.076), indicating acceptable model fit. However, incremental fit indices fell below conventional criteria, with the CFI (.869) and TLI (.853) not

reaching the recommended minimum of .90. Taken together, these results suggest that the hypothesised factor structure is broadly supported.

Table 1 relates directly to the set hypothesis.

Table 1: Burnout: Mean scores and one-sample t test with 4 as the mean score

MBI-ES	N	Mean	Standard Deviation	t	p (2- sided)	Cohen d- value
Emotional exhaustion	262	4.1212	1.38918	1.412	.159	.208
Personal accomplishment	261	4.8150	.97915	13.447	<.001	.973
Depersonalisation	263	2.7002	1.00596	-20.95	<.001	-1.124

Note: Differences with a practical significance, with Cohen d-values larger than .8 are highlighted

The emotional exhaustion scores for academic staff were slightly above the midpoint value of 4. Personal accomplishment was significantly higher than 4, while, as shown in the final row, while depersonalisation was significantly lower than 4. Overall, academic staff thus appear to experience normative levels of emotional exhaustion, report above-average personal accomplishment, and do not display a tendency to depersonalise their students. The hypothesis that academic staff present no burnout symptoms, with the alternative that they experience high burnout, could therefore not be rejected. On the contrary, the findings suggest that burnout symptoms among academic staff are generally low, and that adaptive behaviours –such as strong feelings of accomplishment and the continued recognition of students as individuals – remain prevalent.

Turning to stressors, academic staff scored significantly higher than the mean ($M=3.18$, $SD=0.67$); however, this difference is small according to Cohen's guidelines. These results are presented in Table 2.

Table 2: Mean score and one-sample t test with 3 as the mean score

Academic Job Demands Questionnaire	N	Mean	Standard deviation	t	p (2- sided)	Cohen d- value
Work stress (Total) (21 items)	252	3.1755	.6687	4.167	<.001	.385

Although the difference was statistically significant, its magnitude was small when evaluated against Cohen's (1988) guidelines, where $d \approx 0.20$ represents a small effect, $d \approx 0.50$ a medium effect, and $d \geq 0.80$ a large effect.

In the correlation analysis, the AJDQ total score ($N=251$) was strongly associated with emotional exhaustion ($r=.783$, $p<.001$). In the regression model, with all 21 AJDQ items and demographic variables entered as predictors, the model accounted for 72% of the variance in

emotional exhaustion ($R^2=.72$; adjusted $R^2=.69$) and was statistically significant ($F=22.17$, $p<.001$).

4. Discussion

The conceptualisation of burnout as a construct comprising emotional exhaustion, depersonalisation, and reduced personal accomplishment (Maslach & Jackson, 1981) appears problematic, and the findings of this study lend support to this view. In the present research, emotional exhaustion among academics was not elevated, personal accomplishment was high, and depersonalisation was low. These results contrast with studies reporting higher burnout prevalence, such as Lackritz (2004) and Amir (2020), although direct comparisons are limited because the current study examined mean scores rather than absolute prevalence. The literature itself reflects substantial variation, with some studies reporting very low burnout rates (e.g., Herranz-Bellido et al., 2006; Palmer et al., 2016), underscoring ongoing conceptual inconsistency (Watt & Robertson, 2011).

Importantly, the burnout dimensions did not co-vary. Emotional exhaustion was near the midpoint, personal accomplishment well above it, and depersonalisation well below it. While some scholars identify emotional exhaustion and depersonalisation as core components (Avargues et al., 2010), others emphasise reduced personal accomplishment as more salient among academics (Ardıç & Polatci, 2008; Marengo & Avila, 2016). This raises the question of whether burnout necessarily manifests as the simultaneous presence of all three dimensions or emerges through specific components. From a JD-R perspective, excessive demands may initially manifest as emotional exhaustion, with other dimensions potentially following. These findings support the need for more differentiated burnout models and greater consistency in conceptualisation and measurement to enable cumulative knowledge building (Babbie, 2016; De Vos et al., 2011; Mouton, 2001).

5. Conclusion

The research objectives were achieved. This study contributes to ongoing debates on the prevalence and conceptualisation of burnout by demonstrating that its dimensions did not co-occur uniformly among academic staff. Emotional exhaustion was near the midpoint, personal accomplishment was high, and depersonalisation was low, suggesting that burnout does not necessarily manifest as a unified syndrome. Although burnout levels appeared lower than those reported in some studies, differences in measurement approaches limit direct comparison. Overall, the results do not indicate concern regarding burnout levels and suggest that academics in this context are in relatively good occupational health.

These findings align with variation reported in the literature on burnout prevalence and dominant dimensions, highlighting the limitations of assuming that all components emerge simultaneously. The results support a differentiated understanding of burnout, where dimensions may emerge independently, underscoring the need for greater conceptual clarity and consistency in higher education research. Alternatively, hypotheses should be tested to determine whether personal accomplishment functions as a buffer against emotional exhaustion.

Future research should move beyond treating burnout as a uniform syndrome and examine its dimensions separately, using conceptually consistent and comparable measurement approaches. Larger samples and additional variables would enhance understanding, while qualitative research could provide valuable insights to guide theory-building.

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